

Word Problems applications and interpreting intercepts

1. A group of mountain climbers began an expedition with 100 pounds of food. They plan to eat 5 pounds per day.

- a) Write an equation to represent the amount of food remaining after each day.
- b) How many days will the food last?
- c) Graph the situation.
- d) What does the y-intercept represent?
- e) What does the x-intercept represent?

2. Mike has \$400 and plans on spending \$50 each week.

- a) Write an equation to represent the amount of money remaining after each week.
- b) How many weeks before he runs out of money?
- c) Graph the situation.
- d) What does the y-intercept represent?
- e) What does the x-intercept represent?

3. Kimball High Football team charges \$5 for student tickets and \$8 for those that are not students. In total they made \$520 at a home game.

- a) Write a linear equation to represent the situation.
- b) Graph the situation.
- c) What does the y-intercept represent?
- d) What does the x-intercept represent?

4. A company spends \$400 on Christmas trees and Christmas Lights. Each tree costs \$20 and each light costs \$5.

- a) Write a linear equation to represent the situation.
- b) Graph the situation.
- c) What does the y-intercept represent?
- d) What does the x-intercept represent?